

AMENDMENTS TO THE CLAIMS

Claims 1-48 (Canceled)

Claim 49. (Previously added) A transgenic mouse comprising a heterozygous disruption in a retina-specific nuclear receptor gene, wherein said disruption in a homozygous state inhibits production of a functional retina-specific nuclear receptor protein resulting in a transgenic mouse exhibiting an eye abnormality.

Claim 50 (Canceled)

51. (Currently amended) A transgenic mouse whose genome comprises a homozygous disruption in an endogenous retina-specific nuclear receptor gene, wherein the transgenic mouse lacks production of functional retina-specific nuclear receptor and exhibits an eye abnormality.

52. (Previously added) The transgenic mouse of claim 51, wherein the eye abnormality is retinal dysplasia.

53. (Canceled)

54. (Previously added) A cell or tissue isolated from the transgenic mouse of claim 51.

55. (Currently amended) A method of producing a transgenic mouse comprising a disruption in an endogenous retina-specific nuclear receptor gene, the method comprising:

- (a) introducing a targeting vector which disrupts the endogenous retina-specific nuclear receptor gene in a mouse embryonic stem cell;
- (b) selecting the embryonic stem cell whose genome comprises disrupted retina-specific nuclear receptor gene;
- (c) introducing the embryonic stem cell of step (b) into a blastocyst;
- (d) implanting the resulting blastocyst into a pseudopregnant mouse, wherein said pseudopregnant mouse gives birth to a chimeric mouse; and
- (e) breeding the chimeric mouse to produce the transgenic mouse, comprising a heterozygous disruption in the retina-specific nuclear receptor gene; and
- (f) breeding the transgenic mouse of step (d) to produce a transgenic mouse whose genome comprises a homozygous disruption of the retina-specific nuclear receptor gene such that the mouse lacks production of functional retina-specific nuclear receptor and exhibits an eye abnormality.

56. (Previously added) The method of claim 55, wherein the eye abnormality is retinal dysplasia.